Exhibit 5

Bold, Underlined text indicates additions

Bold, Strikethrough text indicates deletions

DTC Settlement Service Guide

Copyright

IMPORTANT LEGAL INFORMATION

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Participants and other authorized users expressly acknowledge that the services provided by DTC are ministerial in nature. Moreover, as further reflected by DTC's fee structure (which typically bears no relationship to the dollar value of any given transaction), DTC does not accept any risk of loss to Participants, other authorized users and possible third party beneficiaries with respect to transactions being processed by DTC.

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The contents of the Service Guides are updated in different formats on a periodic basis. Participants and other authorized users of the Service Guides will find the most current version of the Service Guides, as well as DTC Important Notices which address the contents of the Service Guides, on DTC's internet site, dtcservices.dtcc.com. DTC shall bear no responsibility for any losses associated with the failure of Participants or other authorized users to follow DTC's most current Service Guides and/or Important Notices. Participants or other authorized users may direct inquiries about the Service Guides, as well as requests for additional copies, to DTCC Learning, The Depository Trust Company, 55 Water Street, 25th Floor, New York, NY 10041-0099, USA; fax number: (212) 855-4737; e-mail address: training administrator@dtcc.com. © DTCC

About Settlement

Overview

This chapter describes DTC's Settlement products. Each section includes a description of the product and how it works, as well as a list of associated Participant Terminal System (PTS) and Participant Browser Services (PBS) functions you can use to access the product.

Note- Although DTC makes every effort to provide you with timely information, you are primarily responsible for obtaining such information without reliance on DTC. We recommend that you reconcile your records with DTC's records before any critical dates or cutoff times.

About DTC's Settlement Department

DTC's Settlement Department is responsible for overseeing the process of the settlement of your transactions. Specifically, the Settlement Department:

- Ensures the collection/disbursement of your net settlement obligations and credits through the Fedwire system
- Ensures that major components of DTC's Settlement Service are updating/processing in a timely manner
- Helps resolve problems affecting the settlement process
- Grants input extensions when processing problems arise
- Provides PTS backup to the extent possible when your systems go down
- Answers your questions regarding all aspects of settlement processing
- Processes deposits and withdrawals of Federal book-entry eligible securities.

About Settlement

DTC's Settlement Service oversees the settlement process of your transactions. This service includes:

- Collecting and disbursing your net settlement obligations and credits through the Fedwire system
- Helping to resolve problems affecting the settlement process
- Granting input extensions when processing problems arise
- Backing up PTS to the extent possible when your systems go down
- · Answering your questions regarding all aspects of settlement processing
- Processing deposits and withdrawals of Federal book-entry eligible securities.

Settlement Transactions

There are three main types of transactions processed through the Settlement system.

- Deliveries: DTC's delivery program allows you to settle securities transactions by making computerized deliveries to another participant's account. The securities are immobilized in DTC's custody, eliminating the need for physical movement of certificates. DTC reduces the seller's position and increases the buyer's position without the need to move physical certificates. Deliveries can be made with or without the condition of money payment, depending on your delivery instructions.
- 2. **Payment Orders (POs):** The payment order service provides you with a convenient method for settling amounts of money related to securities transactions that are effected separately through DTC earlier on the same day or on a previous day. You can use payment

- orders to collect option contract premiums and mark-to-market open contracts such as stock loans.
- 3. Collateral loans: The collateral loan service allows you (the pledgor) to pledge securities as collateral for a loan or for other purposes and also request the release of pledged securities. This service allows such pledges and pledge releases to be made free, meaning that the money component of the transaction is settled outside of the depository, or valued, meaning that the money component of the transaction is settled through DTC as a debit/credit to the pledgor's and pledgee's DTC money settlement account. When pledging securities to a pledgee, the pledgor's position is moved from the pledgor's general free account to the pledgee's account which prevents the pledged position from being used to complete other transactions. Likewise, the release of a pledged position would move the pledged position back to the pledgor's general free account where it would then be available to complete other transactions.

Important Terms

The following terms are important to understanding the Settlement Service:

This term	Refers to	
Aggregate Affiliated Family Net Debit Cap	A limit to the settlement debit an Affiliated Family can incur at any point during the processing day.	
Chill	A systemic way DTC can prohibit you from processing certain activities (for example, valued delivery chill will prevent you from making valued deliveries from your account).	
Collateral Monitor (CM)	DTC's process for measuring the sufficiency of the collateral in your account to cover your net settlement obligation.	
collateral value	The market value of a security less the applicable DTC haircut.	
Computer-to- Computer Facility (CCF/CCF II)	A batch transmission system for input/output based on various protocols between your mainframe and DTC's mainframe.	
Continuous Net Settlement (CNS)	The system employed by NSCC to settle NYSE, AMEX, NASDAQ, and over-the-counter trades.	
deliver order (DO)	The term used to define a book-entry movement of shares of a particular security between two DTC participants.	
Drop	A transaction that does not complete because of insufficient position, Risk Management Controls, and so forth.	
Haircut	The percentage decrease of a security's market value in determining the collateral value of the security.	
initial distribution	The delivery of shares of a new issue from the lead manager and syndicate members to their customers. Shares are considered initial distribution shares until they are sold on the secondary market.	
Largest Provisional Net Credit (LPNC)	A control that ensures that reversing a failed MMI issue transaction does not cause your Risk Management Controls to be overridden.	
long allocations	Deliveries from NSCC's Omnibus Account 888 to your DTC account as a result of Continuous Net Settlement processing.	

This term	Refers to	
market value	The prior day's closing price of a security for security valuation purposes.	
memo segregation	An inventory control mechanism that allows you to protect fully-paid-for securities in your general free or IPO control account.	
Message Queuing (MQ)	A system for messaging across multiple platforms. Developed as part of IBM's WebSphere family, it is also referred to as "WebSphere MQ" or "MQ Series."	
Minimum Amount (MA)	DTC's classification for securities in your account that are not considered collateral.	
Money Market Instrument (MMI)	Debt securities such as commercial paper or medium-term notes that are eligible for DTC's MMI Program.	
Net Additions (NA)	DTC's classification for securities in your account that are considered collateral.	
net debit cap	A limit to the settlement net debit you can incur at any point during the processing day.	
night deliver order (NDO)	A DO input on the day prior to settlement. A reduced rate is charged for NDO transactions.	
Participant Terminal System (PTS)	The terminal-based system that allows for input/inquiry into DTC.	
payment order (PO)	A transaction in which a participant charges another participant for changes in value for outstanding stock loans or option contract premiums.	
receive versus payment NA (RVP NA)	A sub-counter of your NA position that indicates how much of your NA position was received versus payment during the current day.	
Receiver Authorized Delivery (RAD)	A control mechanism that allows you to review transactions prior to completion of processing. It limits your exposure from misdirected or erroneously entered DOs, POs, institutional delivery transactions, MMI transactions, reclaims, and Pledges pledges and releases of pledged securities.	
reclamation or reclaim	The return of a DO _L or PO _L institutional delivery transaction or MMI transaction received by a participant. All reclaims are considered original transactions for purposes of DTC processing and are subject to DTC's risk management controls and RAD.	
Risk Management Controls	The controls, primarily net debit cap and CM, that are used to provide protection to all DTC participants against the inability of one or more participants to settle net settlement obligations.	
settlement progress payments (SPP)	An intraday funds transfer sent via Fedwire to your DTC participant account.	
short covers	Deliveries to NSCC's Omnibus Account 888 as a result of CNS.	
Syndicate	A group of broker-dealers that agree to purchase a new issue of securities from the issuer for resale to the	

This term	Refers to	
	investment public.	
unvalued additions	Unvalued additions to your security account that do not carry a related payment obligation with the receipt of securities. They include:	
	 Deposits Free release of pledged securities Receipt of a free DO Releases of segregated securities 	

Establishing Your Net Debit Cap

A settling bank can limit the net debit cap assigned to each participant it represents. However, the maximum amount set by a settling bank cannot exceed your system-calculated net debit cap established by DTC.

To establish or change the net debit cap for a participant for which it settles, the settling bank must submit a letter of instruction to DTC requesting the amount of the net debit cap for the participant. This letter should be <a href="mailto:addressed-sent-via e-mailto:addressed-sent-via e-mailto:addressed-

The Depository Trust Company Director of Compliance 55 Water Street New York, NY 10041

DTC will process an instruction received by 2:30 p.m. eastern time, in time to be effective as of the opening of the next business day.

ID Net Service

Benefits

ID Net is a service that ultimately benefits all parties involved in institutional trading:

- Reduces the aggregate value of settlements system wide through netting efficiencies
- Presents cost savings for banks and brokers through reduced fees and/or deliveries
- Increases the certainty of settlement for matched institutional trades
- Encourages early affirmation

Overview

Unlike exchange trades and most prime broker trades, most institutional delivery transactions do not currently flow through NSCC's Continuous Net Settlement system ("CNS"). Rather these

institutional transactions settle at DTC. The ID Net Service will allow subscribers to the service to net all eligible affirmed ID transactions against their CNS transactions, if any.

The ID Net Service will accept eligible affirmed institutional transactions from Omgeo LLC or other Affirming Agency that is eligible for the ID Net Service and offset the ID Net Firm side of each transaction with the participating ID Net Firm's other CNS obligations, if any.

Eligibility for the ID Net Service will require that a participating entity be a Member of NSCC and a Participant of DTC ("ID Net Firm"), and that a participating bank be a Participant of DTC ("ID Net Bank") (collectively, "ID Net Subscribers"). In addition, eligibility for ID Net processing will be based on the underlying security being processed, the type of transaction submitted for processing and the timing of affirmation/matching. Participation in the ID Net Service will be voluntary and will be governed by the rules and procedures applicable to the ID Net Service as described in this Notice. All ID Net Subscribers will be required to enter into separate ID Net Subscriber agreements with NSCC and/or DTC, as applicable that govern their use of the ID Net Service.

To facilitate the processing of ID Net transactions, two new securities accounts will be established by NSCC at DTC on behalf of all ID Net Firms that have elected to use the ID Net Service: the "ID Netting Subscriber Deliver Account" and the "ID Netting Subscriber Receive Account" (collectively referred to as the "ID Netting Subscriber Accounts"). NSCC will be the owner of both accounts and will act as agent for the ID Net Firms. NSCC will process ID Net transactions through these accounts on behalf of participating ID Net Firms. While NSCC will direct transactions through these accounts on behalf of ID Net Firms, the ID Net Firms, not NSCC, will be responsible for satisfying applicable DTC risk management controls and Participant Fund requirements for their respective activity through the ID Netting Subscriber Accounts.

The ID Net service offers netting efficiency and reduced security movements for ID Net Subscribers who are NSCC Members. NSCC Members, however, may need to make system changes to reflect how institutional deliveries will now be processed through their system. For Bank ID Net Subscribers the ID Net service was specifically designed to minimize development and to make ID Net processing as transparent as possible.

For more information, contact your Relationship Manager.

Eligibility

A. Participant Eligibility

ID Net is available to members of DTCC subsidiaries. NSCC Members participating in the ID Net service must be eligible for CNS processing as well as Participants in DTC ("ID Net Firms"). Banks must be DTC Participants ("ID Net Banks") (ID Net Firms and ID Net Banks participating in the ID Net Service are referred to collectively as "ID Net Subscribers"). All agent ID numbers associated with a given ID Net Bank will be included for processing. In order to subscribe, firms will follow these steps:

- A subscriber to the ID Net Service will need to submit an ID Net subscriber form to both DTC and NSCC.
 - Upon receipt of the form, DTC's Account Administration will review it for all required information and authorization.
 - If acceptable, the appropriate master file update will take place that evening at approximately 8 p.m.
 - Once the update has occurred, affirmed trades from that evening between two eligible ID
 Net Subscribers will be routed into the ID Net process. Thus, the first eligible ID Net trade
 that could be processed is on the following night.
 - When participants subscribe to ID Net, the transactions eligible for ID Netting will initially be limited to CUSIPs that begin with a "5" to support a phased-in implementation.

Note: A participant should contact its Relationship Manager about testing with DTC and NSCC prior to signing up for ID Net.

B. ID Net Security Eligibility

Most equity securities that are eligible for CNS are eligible for ID Net processing.

ID Net Processing Eligibility

In addition to participant and security eligibility requirements, for a transaction to be eligible for ID Net:

- The trade must be affirmed/matched by: (i) a Registered Clearing Agency as defined in the Securities Exchange Act of 1934, (ii) a clearing agency that has received exemption from registration by the SEC, or (iii) a "qualified vendor" for trade confirmation/affirmation services as defined by the rules of a self-regulatory organization (collectively defined herein as," Affirming Agencies").
- The trade must be affirmed before 9:00 p.m. on (T+1).
- The trade must be regular-way; i.e., T+3 settlement.
- The transaction must be between an ID Net Firm and an ID Net Bank, on behalf of an institutional customer.

Affirmation Processing

The service will be initially rolled out in conjunction with Omgeo. Accordingly, when an Omgeo TradeSuite institutional trade is affirmed/matched, Omgeo will:

- Ensure that both the "ID Net Firm" and "ID Net Bank" are participating in ID Netting, and
- Complete security and trade level eligibility checks and ensure affirmation is effected before the 9 p.m. cut-off on T+1.

Once Omgeo has determined that the trade and parties are eligible for ID Net:

- Omgeo will set the settlement option value field of the affirmed confirm (position 615) equal to "6". Note that "6" is a new value for an existing field. Today, the values used in this field are "2" for regular ID processing and "4" for NSCC prime broker processing.
- For bank deliveries/institutional sells, Omgeo will put the ID Netting Subscriber Deliver Account (# 719) in the depository third-party field of the ID affirmed confirm and leave the original clearing firm in the receiver field.
- For bank receives/institutional buys, Omgeo will put the ID Netting Subscriber Receive Account (# 919) in the depository third-party field of the ID affirmed confirm and leave the original clearing firm in the deliverer field.

It should be noted that the depository third party field of the ID affirmed confirm is not populated today. Therefore, although not required to read the field, machine-readable users should be prepared to receive the depository third-party field's potential new values and ensure that the population of this field will not adversely affect existing processing within their system. Alternatively, ID Net Subscribers may optionally program to read the depository third party field's to ascertain ID Netting Subscriber Account information and related ID Net processing.

Inventory Management System (IMS) Processing

Authorization, Exemption and Cancel Processing for ID Net Banks

Today, when a TradeSuite delivery from a bank is affirmed, the delivery is sent to DTC's Inventory Management System (IMS). ID Net was developed to minimize systemic changes required by ID Net Banks. Except as noted in bold below, ID Net changes are primarily to PTS/PBS screens.

If a trade is flagged as ID Net eligible, DTC will automatically "flip" the original clearing firm from the receiver field into the third-party field of the ID trade and will put the ID Netting Subscriber Deliver Account (# 719) in the receiver field. **ID Net Banks will only be notified of this change if they elect to receive new messages that will be produced by DTC specifically for ID Net, otherwise, systemically, this process will be transparent to ID Net Banks.**

- ID Net Banks may continue to exempt, authorize or cancel ID deliveries before the night cycle
 as they do today. However for the day cycle, it is recommended that ID Net Banks authorize
 their individual ID deliveries and discontinue the practice of sending Deliver Orders (DO)
 for these trades. Otherwise, the contra Participant may reclaim, subject to DTC's risk
 management controls and applicable RAD limits, the DO's since these trades are set up for
 settlement in ID Net. Authorization of individual ID deliveries versus sending DOs is more cost
 effective for banks.
- If an ID Net Bank cancels an ID trade today, it can no longer be acted upon. If a trade is in the ID Net process and is cancelled the trade can no longer be acted upon and the trade will be immediately exited from ID Net processing.
- Transactions exempted by an ID Net Bank will remain in ID Netting until 11:30 a.m. on settlement date. At 11:30 a.m., if still exempted, the delivery will be removed from the ID Net Service. IMS will return the original clearing firm's Participant number back to the receiver field and populate the third-party field of the delivery with the ID Netting Subscriber Deliver Account (#719). This will be transparent to ID Net Banks. If a transaction is subsequently authorized by the bank, it will be delivered to the original clearing Participant on a trade-fortrade basis just as ID trades are processed today with all applicable comment information remaining intact.

The ID Net processing cut-off time of 11:30 a.m. will allow ID Net to give the obligations back to the original parties with sufficient time to allow them to complete the delivery from their account or borrow the security to complete the transaction.

Authorization, Exemption and Cancel Processing for ID Net Firms

ID Net Firms may exempt a receive before the night of T+2 from a bank that is in the ID Net Service via a new IMS capability. This receive exemption will only be permitted on a trade-for-trade basis over PTS/PBS or the Settlement Web. This exemption will exit the transaction from ID Net by returning the original clearing firm number back into the receiver field and making the appropriate CNS adjustment entries. The transaction will then be available for trade-for-trade settlement.

ID Net Firms should continue to authorize/exempt/cancel **their** deliveries from their account as they do today.

- Authorization of ID Net Firm deliveries by the ID Net Firm is not necessary.
- ID Net Firms may exempt their deliveries in the ID Net process either through a new Inventory Management System (IMS) function option or systematically on a trade-for-trade basis by submitting the Omgeo control number as they do now.
- Global exemptions of ID Net deliveries will only be available via PTS/PBS or the Settlement
 <u>Web</u>. If an ID Net Firm sends in a global exemption systematically for its account, it will not
 apply to its ID Net deliveries.
- If an ID Net Firm's delivery is exempted or pend cancelled by the ID Net Firm, the transaction will be exited from ID Net. For exempted transactions, the ID Net Firm can no longer act upon that delivery, i.e., authorize it at a later time.
- If an ID Net Firm's trade is exited from the ID Net process, it will not revert back to an original ID trade from the ID Net Firm's account. The ID Net Firm will need to submit the delivery itself or use the re-introduced drop feature described below.

Settlement and Risk Management Processing

Changes to Risk Management Control Updates for ID Net Firms

ID Net will process an ID Net Firm's DTC debits and credits for its eligible ID trades through the NSCC ID Netting Subscriber accounts. These ID trades will have offsetting debits and credits in the CNS system. As a result, NSCC may owe DTC on any given day for the net of all the ID Net trades processed for all ID Net Firms. In order to protect DTC from having a failure exported from NSCC for liquidity purposes, updates to participants' net debit caps and collateral monitors will be necessary as described below:

A new ID Net collateral monitor and net debit cap balance will be recorded in the processing system. The ID Net collateral monitor will record the net balance of collateral generated for all ID transactions processed through the ID Net service. If the balance of collateral generated by all ID Net receives and delivers is positive, the ID Net Firm's collateral monitor will not be increased by that amount. However, if an ID Net transaction requires collateral, the system will use the ID Net collateral surplus for that ID Net Firm before attempting to use other collateral from that ID Net Firm. If there is insufficient ID Net collateral for that ID Net Firm, the system will look to the ID Net Firm's excess collateral in its account.

Similar to collateral, the system will create a new ID Net settlement balance. When this balance is a net credit from deliveries on the ID Net Firm's behalf through the #919 account, it will only be used to offset incoming ID Net receives to the #719 account. If there is an insufficient ID Net credit to absorb the debit of the ID Net delivery to 719 for that ID Net Firm, the system will create an ID Net debit that will effectively treat the ID Net debit as a reduction of the ID Net Firm's net debit cap and will be displayed on the Risk Management Control Inquiry (RMCI) in PTS/PBS-the Settlement Web. The ID Net debit will only be used for net debit cap calculation purposes and will not represent a participant's actual settlement balance.

• If the ID Net Firm has insufficient collateral or net debit cap, the transaction will pend until 11:30 a.m. on settlement date.

Risk Controls for the ID Netting Subscriber Deliver Account:

- Authorized bank deliveries will be checked for position and collateral as today. The original clearing firm, who is now identified in the third party field, is responsible for collateralizing the ID Net securities being processed into the ID Netting Subscriber Deliver Account #719.
- Receives into the ID Netting Subscriber Deliver Account #719 for the ID Net Firm will be
 available for immediate delivery to CNS. The original clearing firm's memo seg, if any, will not
 be applicable.

Risk Controls for ID Netting Subscriber Receive Account:

- Receives from CNS into the ID Netting Subscriber Receive Account #919 for the original clearing firm will be available for immediate delivery to ID Net Banks. The original clearing ID Net Firm's memo seg, if any, will not be applicable.
- An ID Net Firm can also cancel a pending ID Net delivery (referred to as a pend cancel) from
 the ID Netting Subscriber Receive Account #919 account through <u>PTS/PBS or the Settlement</u>
 <u>Webcurrent methods (ART option #3 or PEND when recycling for collateral)</u> or through
 the new "ID Net Tran Auth Updates" option in the IMS function.

Deliveries from the CNS account to the ID Netting Subscriber Receive Account # 919 will be on a higher priority basis except for buy-in receives, corporate actions and other delivery types as determined periodically by the clearing corporation. By placing the ID Netting Subscriber Receive Account #919 on a higher priority for long allocations, the number and value of ID Net fails will be reduced.

Processing of ID Net Firm Trades Exited from ID Net

A previously eligible ID Net trade can be exited from the ID Net process for a number of reasons. If an ID Net trade is exited from the ID Net Service, it will revert back to an original ID trade from the ID Net Firm's account, despite the fact that the ID Net Firm or IMS may have already performed the authorization or exemption process for ID trades from its account. Trades that are exited from ID Net before settlement processing begins on the night of T+2 will be placed back into an unprocessed state in IMS and the ID Net Firm will have to authorize these trades if it intends to deliver them. Applicable output messages will be available for all exited ID Net trades.

If an ID Net trade is exempted or pend cancelled, the transaction will be exited from ID Net. For exempted transactions, the ID Net Firm can no longer act upon that delivery, i.e., authorize it at a later time.

Some of the reasons that a trade may be exited from ID Net are as follows:

Change of Eligibility

After a trade has been affirmed and deemed eligible for ID Net, the ID Net process will continue to check the transaction's eligibility up until 8 p.m. on the night of T+2. If a trade becomes ineligible, for example, a Reorganization is announced, the trade will be removed from the ID Net process regardless of whether it is in an authorized or an exempt state. The trade will be staged for tradefor-trade settlement between the ID Net Firm and the ID Net Bank and will maintain its current state, i.e., authorized trades will remain authorized and exempted trades will remain exempted.

Attempts to Cancel

After an ID trade is affirmed, ID Net Firms, on occasion, generate an attempt to cancel via Omgeo and exempt the ID trade since the trade may no longer be valid. If the trade is in the ID Net process and is being staged for delivery from the ID Net Subscriber Receive Account #919, ID Net Firms should continue to exempt transactions when an "attempt to cancel" message is generated by Omgeo the same as they do today. Automated exemptions on a trade-for-trade basis via the Omgeo control number will still be accepted for ID Net trades from the ID Net Subscriber Receive Account #919. PTS/PBS or Settlement Web users will use the new ID Net screen in IMS described below in the "IMS Update Screens" below.

Cut-off of 11:30 a.m. on Settlement Date

Trades that are eligible for ID Net but are still in an exempt or unprocessed state or are pending for position or risk management controls at 11:30 a.m. on settlement date will automatically revert to trade-for-trade settlement versus the original clearing firm. They will be exited from the ID Net process at NSCC through a new Miscellaneous adjustment to their CNS position. Any exits from ID Net after the start of the night cycle that create a short or increases an existing short in CNS, will be subjected to the one-day settling trade exemption indicator (the default for this indicator is level 1, i.e., the position will be exempted). The exit processing for ID Net Banks and ID Net Firms will differ as follows:

ID Net Bank Deliveries

ID Net Bank deliveries that remain exempt at 11:30 a.m. on settlement date will be exited from ID Net as follows:

• ID Net will move the original clearing firm back into the receiver field and the ID Net Subscriber Deliver Account #719 will be placed into the third-party field by the ID Net Service. Thus, if a bank authorizes the delivery after the 11:30 a.m. ID Net cutoff, the ID delivery will go directly to the original clearing firm. Currently, the authorization of an ID delivery is permitted until 2:30 p.m. on a trade-for-trade basis via PTS or MO. In order to

- synchronize the ability to authorize an ID delivery with DO cutoffs, the 2:30 p.m. cutoff will be extended to 3:15 p.m. on settlement date for MO and PTS and 3:05 p.m. for CCF/CF2.
- Authorized ID Net Bank deliveries that are pending for position or the deliverer's or receiver's risk management controls will also be exited from ID Net and will continue to recycle in the system to the ID Net Firm. The ID Net Bank delivery will be systematically updated so that the original clearing firm will be moved back from the third party field to the receiver field and the ID Net Subscriber Deliver Account #719 will be placed into the third-party field. The transaction will continue to recycle with the same Relative Block Number (RBN the unique transaction number applied by the processing system); however, if it re-pends or completes, it will be assigned a new RBN # that will point to the original RBN.

ID Net Firm Deliveries

- ID Net Firm deliveries from the ID Netting Subscriber Receive Account #919 that are pending for position or because of risk management controls will drop at 11:30 a.m. on settlement date
- Re-introduction of ID Net Deliveries for ID Net Firms

Deliveries that do not complete for position or controls will be available for immediate reintroduction from the original clearing firm's account through a new optional IMS function at 11:30 a.m.

The ID Net reintroduced drop will appear and will be charged as a regular ID trade (MITS transaction type in IMS). The reintroduced drop can be viewed by the ID Net Firm in the "Transaction Authorization Inquiry" option in IMS. An ID Net reintroduced drop will remain in an Unprocessed state (will not be processed) unless the ID Net Firm authorizes the delivery in IMS. ID Net Firms can elect to have their ID Net reintroduced drops automatically authorized by setting their "ID Net Drop Authorization Profile" to passive. ID Net Firms should use the new "ID Net Drop Auth Profile Update" option in the IMS function to switch their ID Net drop profile from Active (the default) to Passive. ID Net Firms can view their ID Net drop authorization profile in the IMS function by selecting the "ID Net Drop Auth Profile Inquiry" option.

Reclaims

ID Net same-day reclaims are only applicable to deliveries from the ID Netting Subscriber Receive Account #919. These reclaims will be directed to the original clearing firm rather than the omnibus account #919 and are subject to DTC's risk management controls and applicable RAD limits.

DTC strongly recommends that ID Net reclaims of receives from the ID Netting Subscriber Receive Account #919 include the Relative Block Number (RBN) and Original Date. Reclaims processed without the RBN and Original Date will be treated as original transactions and will not be matched or linked.

Same day matched reclaims (reclaims of receives processed that business day that are submitted to DTC using the RBN and the original date or are reclaimed via ART) will be processed against the ID Net Firm's account and will not go to the Receiver Authorized Delivery system for approval. Other than an insolvency situation, normal same day matched reclaim rules will be applied against the controls of the ID Net Firm in the third-party field. As a result, the ID Net Firm must have sufficient collateral and debit cap if the reclaim is greater than \$15 million. Therefore, a reclaim to account #919 could recycle for deliverer's collateral, receiver's collateral (the ID Net Firm in the third-party field), or receiver's debit cap (the ID Net Firm in the third-party field).

ID Net reclaims processed as next-day reclaims should be processed directly to the ID Net Firm's account and may go to RAD depending on the ID Net Firm's RAD limits (DTC will change the

receiver number to the ID Net Firm in the third-party field for same-day matched reclaims and linked reclaims when the receiver is account #919).

Participants will be able to view reclaims of ID Net deliveries via a new SMART/Search report "IMS ID Net Reclaim Report".

Pend Holds

ID Net Banks will be permitted to place holds on their ID Net deliveries that are pending for insufficient position in the PEND function.

ID Net Firms will not be permitted to place pend holds on their ID Net deliveries that are being processed from the ID Netting Subscriber Receive Account #919.

NSCC Clearing Fund Offset and Mark-to-Market

ID Net transactions will be used to offset the balance of any other CNS transactions, and the "net" of those transactions will be used for purposes of determining Clearing Fund obligations pursuant to NSCC's current procedures, subject to a revised mark-to-market calculation applicable to ID Net Firms.

ID Net transactions will receive their own separate mark-to-market (MTM) calculation. This ID Net MTM total will be added to each member's daily clearing fund requirement.

DTC Participants Fund

DTC's participant's fund calculation is based upon a participant's legal entity net debit peaks. DTC will continue to include the debits and credits associated with ID Net deliveries that are processed on behalf of an ID Net Firm in its fund calculation.

Output and PTS/PBS Screen Changes

Today, the third party field of an ID trade isn't populated. Participants should ensure that DTCC's populating this field will not adversely affect existing processing within their current system.

Omgeo

For more information on how ID Net will affect other Omgeo processing, please refer to the Omgeo Product Bulletin in the TradeSuite section of the Omgeo website.

Billing Information

ID Net Banks and ID Net Firms will be charged a reduced DTC ID Net fee of \$0.025 for each completed delivery and receive processed versus the ID delivery or receive fee of \$0.05. Additionally, deliveries that are exited from the ID Net service will not be charged a drop fee.

ID Net deliveries pend cancelled by ID Net Firms from the ID Netting Subscriber Receive Account #919 will continue to be charged the \$0.45 pend cancel fee.

ID Net deliveries to and from CNS on behalf of the ID Net Firms will not be charged.

ID Net deliveries that are reintroduced and completed will be charged the normal \$0.05 DTC ID fee to both the receiver and deliverer. Terminating the ID Net Service

If an ID Net Subscriber wanted to terminate their participation in ID Net, the following procedure would apply:

- A subscriber to the ID Net service will need to submit an ID Net exit notification to DTC's Account Administration area.
- Upon receipt of the form, it will be reviewed for all required information and authorization.
- If acceptable, the appropriate masterfile update will take place that evening at approximately 7 p.m.
- Once the update has occurred, affirmed trades would no longer be routed to ID Net after the
 masterfile update. If an ID Net Subscriber wanted to exit all the trades it had in ID Net, it could
 do so.
- ID Net Firms and ID Net Banks can cancel or exempt their future ID Net transactions where they are the delivering party.
- ID Net Firms can cancel or exclude their future ID Net transactions where they are the receiving party.
- An ID Net Firm's or ID Net Bank's ID Net receives can also be exited by the Settlement
 department at DTC by notifying the Settlement Operations department. This request will be
 processed on a best efforts basis.

Initial Public Offering (IPO) Tracking System

About the Product

The Initial Public Offering (IPO) Tracking System tracks the movement of IPO shares for a specific time period and reports activity to the IPO's Lead Underwriter and Syndicate Members. The goals of the system are to provide:

- Automated tracking of IPOs with no disruption to the normal book-entry process
- Accurate, comprehensive and timely reports to the Lead Underwriter and Syndicate Members
- The greatest possible economic efficiency by allowing IPOs to be distributed and tracked in a book-entry environment.

Note- For a more detailed explanation of the IPO Tracking System, refer to the IPO Tracking System User's Manual.

Associated PTS Functions

The following PTS functions are used in association with the IPO Tracking System.

Use this function	То	
DO	Enter deliver orders for IPOs.	
IPOU	Perform various IPO-related activities, such as:	
	Transferring shares to another participant	

Use this function	То	
	 Adjusting your customer information Moving shares from your general free account to your IPO control account to deliver oversubscription shares (Lead Underwriters only) Cancelling recycling transactions Performing IPO stock loan transactions. 	
IPOI	View information about tracked IPO issues.	
NDOM	Enter night deliver orders (NDOs) for IPOs.	

IPO Tracking System Contact Number

For more information about the IPO Tracking System, call DTC's Customer Support Center at (888) 382-2721.

Investment Identification

About the Product

At your request, DTC will segregate securities for the account of a firm, partner, officer, stockholder, or for an omnibus account. If this segregation is for Internal Revenue Service purposes, please refer to Revenue Ruling 64-160 (also published as Technical Information Release 591), modified by Revenue Ruling 76-489.

Securities are segregated by the serial number appearing on the Investment Identification Instruction form. The serial number appears on the Participant Daily Activity Statement on the date of activity and is reported on the end-of-month statement until you no longer have a position in the issue or you have instructed DTC to release the securities from segregation.

Note- You must use the PTS function INID to segregate securities and the RNID function to release securities.

Dividends and interest due are allocated as follows:

- 1. Cash dividends and interest due are allocated to the Investment Identification positions and other positions. Allocations appear on your Dividend/Reorganization Cash Settlement List.
- 2. Stock dividends are calculated on the Investment Identification positions and other positions, and are credited to your general free account on the payable date.
- 3. Stock splits are calculated on the general free and pledged positions as well as the Investment Identification account. The dividend is added to each respective account on settlement date.
- 4. DTC allocates cash merger and mandatory put payments as well as municipal and corporate redemption payments for positions segregated on DTC's books.

Investment Identification activity is recorded on your Participant Daily Activity Statement. Check your statement to be sure your transactions were properly processed and recorded.

Warning! Under DTC's Rules and Procedures you are responsible for verifying the accuracy of your Participant Daily Activity Statement. You must report discrepancies to DTC's Reconciliation division at (212) 855-4904 as soon as possible after you receive the statement.

Associated PTS Functions

The following PTS functions are used in association with Investment Identification.

Use this function	То
INID	Segregate securities.
POSM	View your position increase.
RNID	Release securities.

Investment Identification Contact Number

For more information on Investment Identification, call DTC's Customer Support Center at (888) 382-2721.

Look-Ahead Processing

DTC's Look-Ahead process runs on fifteen minute intervals and selects pairs of transactions that when processed simultaneously will not violate the involved Participants net debit cap, collateral or other Risk Management system controls.

The Look-Ahead process reduces transaction blockage for securities by identifying a receive transaction pending due to a net debit cap insufficiency and determines whether an offsetting delivery transaction pending because of a quantity deficiency in the same security would permit both transaction pending because of a quantity deficiency in the same security would permit both transactions to be completed in compliance with DTC's Risk Management system controls. DTC's processing system, Account Transaction Processor (ATP) calculates the net effect to the collateral and net debit cap controls for all three Participants involved and if the net effect will not result in a deficit in the collateral or net debit cap for any of the three Participants, ATP processes the transactions simultaneously.

DTC's Look-Ahead process also allows Money Market Issuance Deliveries pending for a Custodian's or Dealer's net debit cap to complete against Maturity Presentments pending for an Issuing/Paying Agent's net debit cap. The processing system calculates the net effect of the dollar amount of offsetting transactions in the accounts of the two Participants involved. If the net of the transactions results in positive risk management controls in those two accounts, the transactions will be completed.

OCC Market Loan Program

In order to reduce the possibility of mis-matched stock loans, look-ahead matches on number of shares and dollar amount in addition to CUSIP on stock loan transactions in the OCC account.

Money Market Instrument (MMI) Issuer Failure Process

About the Product

The Money Market Instrument (MMI) Issuer Failure process is designed to protect DTC and its participants from incurring financial losses when an MMI issue defaults. Using the MMRP function, issuing paying agents (IPAs) can notify DTC that they refuse to pay maturity or periodic interest payment proceeds, or both, for an MMI issue. An IPA must inform DTC of its refusal to pay by 3:00 p.m. eastern time. After DTC verifies the default it begins MMI Issuer Failure procedures.

How the Product Works

Upon notification of a default, DTC:

- Freezes the issue, preventing further issuance and maturity activity
- Globally locks all CUSIP numbers associated with the failed issue to prevent any activity
- Devalues all of the Issuer's MMIs for Same-Day Funds Settlement (SDFS) collateralization
- Reverses all of the Issuer's issuances, maturities, and income presentments processed that day
- Notifies participants of the default via the FFSP function
- Reverses all deliveries of newly issued paper.

Notifying DTC of Temporary Refusal to Pay

A Temporary Refusal to Pay Income Presentments occurs when a paying agent indicates an issuer's inability to fund income presentments (IPs). This is considered a temporary situation that will be resolved the next business day. Paying agents enter these notifications via the MMRP function. When DTC receives a notification, it:

- Temporarily devalues to zero all of the Issuer's MMIs for collateralization. (The value will be reinstated the following business day.)
- Temporarily reverses all of the issuer's issuances and income presentments processed that day. These transactions will be automatically processed the next business day.
- Notifies participants of the temporary default.
- Blocks from DTC's systems all further issuances and maturities by that Issuer for the rest of the business day.

Note- You can use Temporary Refusal to Pay Income Presentments only if the issuer's only obligations that day are IPs.

Notifying DTC of Issuer Failure

Because Refusal to Pay and Temporary Refusal to Pay notifications are critical, paying agents should call DTC's Settlement Hotline at 212-855-5800 to confirm that DTC received the notification.

Associated PTS Functions

The following PTS functions are used in association with the MMI Issuer Failure process.

Use this function	То
FFSP	View reversed transactions.
ART	View reversed transactions.

Use this function	То
MMRP	Submit payment refusals.

MMI Issuer Failure Contact Number

For more information about MMI Issuer Failure, call DTC's Customer Support Center at (888) 382-2721.

MMI IPA MP Pend

Overview

The MMI IPA MP Pend function or "MP Pend" will allow an issuing/paying agent (IPA) bank the ability to control its exposure to high risk issuers that have known or anticipated funding or credit issues.

By enhancing money market instrument (MMI) processing, the MP Pend function will assist in mitigating the collective risk for DTCC and its participants.

Benefits

- Gives IPAs the ability to anticipate and react to potential funding and credit issues associated with maturity presentments.
- Expected to reduce the number of late-day reversals.

Background

Maturity payment procedures were designed to limit credit, liquidity, and operational risk for DTC and participants in the MMI program. Maximizing efficiency at the lowest level of risk is the primary goal. To expedite the process, early on the day the MMI matures—approximately 2:00 a.m. Eastern Time (ET)—DTC automatically sweeps maturing MMI positions from accounts of investors' custodians with positions in the maturing issues and initiates maturity presentments (MPs) to the accounts of the designated IPAs.

MPs are effectively provisional book-entry deliveries-versus-payment submitted for inclusion in that day's settlement balance. DTC debits the IPA's account in the amount of the maturity proceeds for settlement that day and credits the same amount of the maturity proceeds to the investor's custodian account for payment that day to the investor.

Because MPs are processed automatically and randomly against the IPAs' DTC account, IPAs are provided the ability to refuse to pay for a specific issuer's MP in the event that the issuer defaults on its obligation to the IPA. These MPs are subject to reversal later in the day if an IPA refuses to pay (RTP) by 3:00 p.m. ET. The objective of the MP Pend function is to reduce the need for late-day reversals.

Replacement of MPCS Function

MP Pend will replace the existing PTS Maturity Presentment Contingency System (MPCS) function that is used by DTC Operations and IPAs in extraordinary circumstances to pend and release MMI MPs on a global basis.

Legal Disclaimer

In order to confirm that IPAs have the authority to pend MPs and understand the submission rules, they are required to review and accept a legal disclaimer each time they create or change an MP Pend profile.

Before submitting an MP Pend profile, the IPAs click to acknowledge that they have read and accept the terms and conditions.

Legal Disclaimer that the IPA Agrees To

The Issuing Paying Agent for issuer, hereby represents and warrants that it has the authority to submit the request appearing on the next screen(s) and that it will either release the items held in "pend" prior to 3:00 pm Eastern Time (ET) on the date of maturity or by such time communicate to DTC that it will refuse to pay. The Issuing Paying Agent for issuer, acknowledges, understands and agrees that all MPs will be released for normal processing if it does not communicate its intention to DTC that it wishes to refuse to pay by 3:00 pm ET.

How MMI MP Pend Works

MP Pend allows IPAs to review and approve MPs prior to having them processed into their IPA settlement account. IPAs will be able to pend an MMI maturity presentment and release transactions daily prior to the 3:00 p.m. ET settlement cutoff.

The four pend levels that MP Pend provides give the IPA greater control over which portion of an MP should pend and which portion should be processed. Using MP Pend, the IPA can pend one of four levels. The highest or broadest level is the acronym level. The lowest or most specific level is the base CUSIP.

The pend levels below are listed from the highest (acronym) to the lowest (base number) level. If you set up a profile for a base CUSIP number, you must first select the Acronym, Product, and Program that contain the base CUSIP you wish to pend.

MMI MP Pend Levels

- Acronym (highest level)
 Product
- 3. Program
- 4. Base Number

Workflow in MMI MP Pend

The following is a typical workflow for IPAs in MMI MP Pend.

- 1. Set up an MP Pend profile for the designated issuer's MPs
- 2. View all the transactions that are pended or that have been released
- 3. Release all transactions for processing or submit a refusal to pay to DTC by 3:00 p.m. ET.
- 4. Leave the MP Pend profile active for subsequent days; deactivate the profile for re-use later; or delete the profile.

Business Rules

The following are cutoff times for MMI MP Pend and related functions. All actions are processed realtime and take effect immediately.

Pend Maturity Presentments (MPs)	Night prior to the maturity presentment (MP) sweep or intraday for MPs with variable rate.	Immediately.	MPs that are Activity Code 28 or intraday MPs for the same issuer acronym.
	If the IPA profile request is submitted after the MPs are processed, then they will not be pended but will be processed as pending items the following business day.	Note: the MP Pend profile remains in effect until you deactivate or delete it.	Note: Includes RPs (reorganization presentments.)
Release Maturity Presentment (MP) Transactions	All pended items must be released the same day that the MP matures by 3:00 p.m. eastern time.	Immediately.	MPs that are Activity Code 28 or intraday MPs for the same acronym.
	If the IPA takes no action by 3:00 p.m. eastern time, then these items will be released by DTC Operations for normal processing.		Note: Includes RPs (reorganization presentments.)
Add Rate for MMIs with Unknown Rates	The IPA must add the rate in PAMM or PORS before pending MPs can be released.	Immediately.	MPs that are Activity Code 28 or intraday MPs of the same acronym.
Refusal to Pay (RTP) Maturity Presentments (MPs)	All refusals to pay must be submitted by 3:00 p.m. eastern time in the PTS/PBS MMRP function.	Immediately.	All MPs that are Activity Code 28 or intraday MPs for the same acronym.
	If the IPA takes no action by 3:00 p.m. eastern time, then all pending items will be released by DTC Operations for normal processing.		Note: Includes RPs (reorganization presentments.)

Important Terms

MMI MP PEND Actions and Statuses

MP Pend gives the IPA the ability to set up their Pend profiles in order to indicate which issuer MPs will be pended and at what level. For example, as long as an MP Pend profile is active, all MPs that match that profile will be automatically pended. An MP Pend profile may be created, deactivated, reactivated, or deleted.

Create

Creates the IPA's MP Pend profile in an Active status. Any MPs that correspond to the profile are pended effective immediately.

Deactivate

Deactivates an MP Pend profile thereby disabling the profile without deleting it. If you deactivate the profile, it is in Inactive status. Deactivating turns off the profile, but you can reuse it by activating it.

Note: Deactivating a profile does not affect the transactions that are pended. The IPA still needs to release each MP that is pending. The deactivation would take affect for any MPs that are submitted after the profile is deactivated.

Activate

Reactivates an MP Pend profile that has previously been deactivated. If you activate the profile, it is in Active status, and MPs that correspond to this profile are pended immediately.

Delete

Deletes an MP Pend profile. Delete a profile if you no longer intend to use it; deactivate a profile that you wish to turn off now but may want to reuse.

Note: Deleting a profile does not affect the transactions that are pending. The IPA still needs to release each MP that is pending.

Maturity Presentment

In MMI MP Pend, maturity presentment is defined as the following:

- MPs and Reorganization Presentments (RPs) that are activity code 28 processed the night prior to the maturity date and/or intraday for MPs of the same acronym.
- For MMIs that pay interest and principal, the last interest and principal payment that is combined into a single maturity payment (activity code 28-0) to the holder on maturity date.
- For MMIs that make periodic principal payments (both fixed and variable rate, the last periodic principal payment (PPP) made for these MMIs, if made on maturity date.
 Note: For MMIs that make periodic principal payments on an accelerated basis prior to the scheduled maturity date, a reorganization presentment (RP) (activity code 28-1) is generated.

MMI MP Pend Levels

Users can create a Pend profile for an MP based on acronym, product, program, and base CUSIP number:

Acronym

The four character DTC identifier for the issuer of the MMI.

Product Type

The type of money market instruments (MMI). There are 14 different MMIs which include:

- Corporate Commercial Paper
- Municipal Commercial Paper-Tax-Exempt
- Municipal Commercial Paper-Taxable
- Bankers' Acceptance
- Discount Note
- Bank Note-Short-Term
- Medium-Term Note
- Bank Note-Medium-Term
- Deposit Note-Medium Term
- Institutional Certificate of Deposit
- Preferred Stock (in commercial paper-like mode)
- Corporate Variable Rate Demand Obligation (VRDO) for Commercial Paper (CP)
- Municipal Commercial Paper-Tax-Exempt (VRDO/CP) and
- Municipal Commercial Paper-Taxable (VRDO/CP).

Program

The section of the Securities Act of 1933 for which an MMI is exempt. Examples include SEC 3(a) 2; 4(2); 144A; and Reg S. Unless selected the default is none.

Base Number

The first 6 digits of the CUSIP issuance also referred to as the issuer or CUSIP base number.

MMI MP Pend Menu

MMI MP Profile Maintenance page

Used to pend MPs by adding a Pend profile. You can later deactivate, re-activate or delete a profile.

MMI MP Profile Inquiry page

Used to see the MP Pend profiles you have added to MP Pend. You can see whether the Pend profile for a given MP is currently in effect (Active status) or not (Deactivated status).

MMI MP Transaction Inquiry page

Used to see the MP transactions processed within the last 21 business days. You can see statuses for MPs that are released, held, or failed. You can look up transactions at the various levels such as acronym, product, program, base CUSIP number.

MMI MP Transaction Releases page

Used to release the MP transactions that are pended.

MMI MP Pend Inquiry in PTS, and PBS and Settlement Web

IPAs can view their MP Pend transactions within the last 21 business days on the MMI MP Transaction Inquiry page. Transactions are archived and maintained by DTC for 7 years.

IPAs and Participants can also view MP items that are pending in <u>using</u> the <u>PTS and PBS</u> functions listed below:

PTS	PBS	Settlement Web
	MMI MP Pend Service	
RMCI	Risk Management Controls	Risk Management
	*	Control Inquiry*
PEND	Pending Activity	
IMS	Inventory Management	
	System	
MMIT IPA Summary and Time Slice		

^{*} MPs that are pended are released prior to the LPNC (largest provisional net credit) 3:05 p.m. ET cutoff.

PBS Inquiry Functions

In the PBS browser applications listed above and described below, the inquiry screens have been revised to include items that are pending due to an IPA MP hold request. Select **IPA Held** as a selection option for your inquiry and click **Search**. To see details for MPs, click the underlined data (such as the control number) within the search results.

PTS/PBS RMCI FUNCTION SETTLEMENT WEB RISK MANAGEMENT CONTROL INQUIRY FUNCTION

The Risk Management Controls Extended screen appears in PTS when you press PF12/24 on the Risk Management Controls screen, and displays additional details about a collateral group's current balances. The screen has been revised to includes amounts for money market instrument (MMI) maturities that are "held" in a pending status in IMS by the issuing and paying agent (IPA) and are shown under IPA Held MMI MP. If you enter X to select IPA Held MMI MP you can obtain pending activity details as that will display the applicable detail screens in the PTS PEND function.

PTS/PBS PEND FUNCTION PENDING ACTIVTY INQUIRY FUNCTION

Participants can view items on the Pending Activity Inquiry screen which allows you to enter your inquiry parameters selection criteria. The inquiry screen has been revised to include items that are pending due to an IPA MP hold request. The MPs that are held by the IPA will be designated as IPA HLD in PTS (or IPA Held in PBS and Settlement Web) on the main Pending Activity Inquiry screen. For example, a participant that is anticipating an MMI delivery can enter an X to select IPA HLD (IPA Held MMI MPs) to view these items on the Pending Activity Inquiry screen.

Payment Orders

About the Product

DTC's Payment Order service allows you to settle money payments for transactions that were processed separately.

How the Product Works

A participant wanting to collect money (the payee participant) from another participant (the payor participant) first contacts the payor participant to reach agreement on the amount payable. The payee participant then submits to DTC a premium payment order (PPO) or a securities payment order (SPO). The PPO is used to collect a net option contract premium for an opening writing or

closing purchase transaction. The SPO is used to collect a mark-to-market payment based on the difference between the current and previous market value of an open securities contract. Either type of payment order authorizes DTC to credit the payee participant's settlement account with the specified amount and to debit the payor participant's settlement account for the same amount.

The following are typical situations in which you would use the Payment Order service.

- A bank's customer writes an opening call option. Through DTC the bank deposits underlying securities with the Options Clearing Corporation (OCC). The bank (the payee participant) submits to DTC a PPO crediting its settlement account for the amount of the net option contract premium and debiting the account of the broker (the payor participant) for the same amount.
- A bank's customer purchases a closing call option. OCC releases underlying securities
 previously deposited with it through DTC. The broker (the payee participant) submits to
 DTC a PPO crediting its settlement account for the amount of the net option premium and
 debiting the account of the bank (the payor participant) for the same amount.
- A participant delivers securities to another participant through DTC in a stock loan transaction. Thereafter, the market value of the securities increases significantly. The lender (the payee participant) submits an SPO to DTC crediting its settlement account for the amount of the difference between the original and new market values and debiting the account of the borrower (the payor participant) for the same amount.

Receiver Authorized Delivery and Reclaim Procedures for Payment Orders

All Payment Orders are subject to matching via RAD prior to delivery of the payment.

Note- You can use FFSP to get a list of Settlement activity codes and their descriptions.

Receiver Authorized Delivery (RAD)

About the Product

RAD protects Participants from the possibility that reclaims will not complete as a result of DTC's Risk Management Controls. RAD allows Participants to review and either approve or cancel incoming deliveries before they are processed so Participants can avoid reclamations. All Dos and POs are subject to RAD controls except for Omgeo TradeSuite (ID) deliveries where the Participant does not opt to have them routed to RAD via a RAD profile (as set forth below). The RAD limit for ID transactions for which the Participant opts to have routed to RAD is set to DTC's default limits. However, DTC same day reclamations of ID deliveries with settlement values less than \$15 million will be processed regardless of DTC Risk Management Controls. Same day reclamations above these limits will be processed subject to DTC's Risk Management Controls and the receiver's (that is, original deliverer's) RAD. Participants are allowed to create RAD limits below DTC's RAD limits, but should note that DTC will always process transactions against the higher value.

You can set individual dollar limits (bilateral limits) against each contra-participant so that deliveries with a settlement value exceeding the specified limit are not processed until you have approved them. Although most transactions that are currently routed to RAD involve bilateral limits set by receivers on deliverers, DTC also routes several other types of transactions to RAD for the receiver's approval. See Transactions Automatically Routed to RAD below.

RAD allows Participants to review and either approve or reject incoming deliveries before they are processed. All valued DOs, POs, institutional deliveries, MMI transactions, reclaims, pledges and releases of pledged securities are subject to RAD controls.

Participants are allowed to set their own RAD limits on a global or bilateral level. Global limits apply to all contra-participants and bilateral limits allow Participants to set individual limits against a specific contra-participant.

Money Market Instrument (MMI) delivery transactions will be subject to RAD regardless of the transaction value. DTC will allow you to set individual dollar limits (bilateral limits) as described above, but note that MMI transactions will not be subject to matched reclamation and therefore any reclaim will be treated as an original transaction and will be submitted to RAD for approval as well as be subject to DTC's normal risk management controls.

Eligible Transaction Types

You can route the following transaction types through RAD:

- DOs
- POs
- Valued pledges
- Valued releases.

The following transactions are always exempt from RAD processing:

- Initial distribution deliveries (refer to the IPO Tracking System User's Guide for reason codes)
- Continuous Net Settlement (CNS) deliveries
- MMI maturity presentments
- Validated matched reclamations
- Matched transactions from a third party subject to the required participant agreement.

Transactions Automatically Routed to RAD

DTC automatically routes the following transaction types to RAD.

Free and Undervalued MMI Deliveries

DTC routes free (based upon a receiver's profile) and substantially undervalued MMI deliveries to RAD. MMI deliveries are substantially undervalued if the settlement value is less than 90 percent of market value of the underlying securities. You can elect to have free MMI Deliver Orders (DOs) automatically bypass RAD via a profile capability. This profile, which is updated by receiving Participants, provides the ability to create a profile in RAD on either a bilateral or global basis.

Warning! A receiver that authorizes a free MMI transaction is deemed to have made an agreement with the deliverer that it will make payment outside DTC in accordance with the deliverer's instruction in the free transaction. DTC does not enforce compliance with such agreements. Participants must enforce these agreements themselves.

Valued Transactions

DTC automatically routes valued transactions (except same day matched reclaims) submitted to DTC late in the day, between 3:00 and 3:20 p.m. eastern time.

Transactions Optionally Routed to RAD

You can opt to have Omgeo TradeSuite (ID) deliveries routed to RAD via a RAD profile. If such option is elected, all RAD Rules will be applicable to ID deliveries except the applicable RAD limit shall be \$15 million for ID reclaims.

A receiving Participant can opt to have all new valued issuances (regular and indexed principal) go to RAD after 2:00 p.m. via a RAD profile.

Stock Loans

Participants may establish bilateral and global RAD profile limits specifically for their stock loan and stock loan return activity. Applicable stock lending transactions will be checked against the receiver's stock lending profile limits for passive approval or will otherwise await the receiver's active approval based on the parameters of the profile. Absent a Participant establishing a Stock Loan RAD limit profile, a Participant's transactions will be subject to the RAD functionality applicable to ordinary DOs, including the established DTC limits as well as Participant established bilateral and global limits.

Approving or Cancelling Deliveries

You can approve or cancel transactions received via DTC's Settlement Web interface or an automated RAD messaging process.

Turning RAD Limits On and Off

You can turn off RAD limits via DTC's Settlement Web and allow DTC to process all your incoming deliveries. You may want to turn off your RAD limits, for example, when you are unable to modify the bilateral limits of your contra-participants because of time constraints. Your bilateral RAD limits will not be in effect until you turn them back on via the Settlement Web.

Transactions that are automatically routed to RAD are not affected by your decision to turn off RAD processing; they always require your approval before processing.

Pledgee Accounts

You can opt, via a RAD profile, to process your valued pledges, regardless of value, only after your RAD approval. This allows you to review and approve securities being pledged by another participant as collateral before your settlement account is debited (and the pledgor's account is credited) for the transaction.

If you do not use this option, your valued pledges are subject to normal RAD rules. This means that pledges with a settlement value less than your RAD limit for that participant are automatically processed to your account.

Free Transactions

Participants can force free receives (DOs) to their RAD if input after 5:00 p.m. eastern time. Forcing them will effectively block free receives from being booked into a participant's account between 5:00 p.m. and the free delivery cutoff of 6:15 p.m.

Unless designated otherwise by a profile, all MMI free receives are sent to RAD, at all times. Participants who elect to turn on RAD at 5:00 p.m. will have all their free receive activity routed to RAD for approval or cancellation. This will aid participants who choose not to monitor their account for free delivery activity after 5:00 p.m., and are not aware of these free receives until the next day. Participants can update their accounts to turn on RAD at 5:00 p.m. for all free receives via a profile in the Settlement Web.

Note- This process does not apply to same-day matched reclaims input after 5:00 p.m. eastern time.

Indexed Principal Transactions

You can view and act on MMI transactions in RAD for issues that contain an indexed principal feature. Deliver Order (DO) transactions are directed to RAD whenever:

- An issuing/paying agent (IPA) initiates a DO in an MMI program that allows for indexed principal as a possible feature of any issue under the program, or
- A dealer/sales agent initiates a turnaround DO in an MMI program that allows for indexed principal of any issue under the program, or
- A participant other than an IPA initiates a DO in an issue already designated as having an indexed principal feature.

Wind-Down Participant

DTC may, in its discretion, apply RAD to all DOs and POs initiated by a Wind-Down Participant, regardless of value. Receiving Participants may raise their RAD limits to manage such transactions.

RAD Contact Number

For more information on RAD, call DTC's Customer Support Center at (888) 382-2721.

Reclaims

About the Product

Reclaims return a deliver order (DO) to the original delivering party.

How the Product Works

To process a reclaim, you identify a DO as a reclaim by using a specific reason code, which returns the securities to the original delivering party. Use the PTS function DORI to view a list of reason codes.

You can submit reclaims in a freeform mode by entering a DO, or you can use DO and Activity Research Tool (ART) functionality to utilize DTC's automated reclaim facility. The DO function allows you to submit DO reclaims by simply entering the transaction number of the delivery being reclaimed. ART allows you to reclaim a transaction by marking the original transaction.

Note You can find the transaction number (an eight digit identification number assigned to every transaction received at DTC) using ART functionality. ART also allows you to select from a list of completed transactions the deliveries and payment orders you want to reclaim.

Matched Reclaims

DTC attempts to match all DO reclaims, except:

- 1.—Partial reclaims (a reclaim of only part of a delivery),
- 2.—Reclaims submitted using the night DO process, and
- 3.—Money Market Instruments (MMI) DOs.

DTC's system attempts to identify a corresponding original transaction for every reclaim presented for processing. If the system identifies a corresponding original transaction, it processes the reclaim as a match, but only if the following seven elements are present:

- 1.—Receiver
- 2.—Deliverer
- 3.—CUSIP

- 4.—Quantity
- 5. Dollar amount
- 6.—Shares
- 7.—Settlement date

Note—When inputting reclaims using Message Queuing (MQ) or Computer to-Computer Facility (CCF), enter DTC's unique transaction number (for example, the Relative Batch Number (RBN)) to reclaim a specific receive if multiple receives have the aforementioned seven elements.

After receiving a reclaim for a DO, DTC determines whether the reclaim's corresponding transaction completed on the current day. All reclaims with a corresponding original transaction that completed on the current business day are processed as matched reclaims.

Processing Matched Reclaims

You cannot use DTC's automated reclamation facility to enter a reclaim reversal for any matched reclaim you receive. You must use a DO to reverse (re-reclaim) a matched reclaim.

No matched reclaim, regardless of value, is subject to Receiver Authorized Delivery (RAD) processing, which means that the receiver of a matched reclaim will not have the opportunity to review and approve the reclaim before it is processed. In addition, no matched reclaim for affirmed institutional transactions with a settlement value less than \$15 million is subject to your collateral and net debit cap controls. DO reclaims for affirmed institutional transactions with a settlement value of \$15 million or higher are subject to normal Risk Management Controls and the receiver's RAD.

OCC Market Loan Program

All reclaims to the OCC account will recycle until the OCC submits a redelivery back to the lender or until the reclaim drops at the recycle cutoff. If the OCC does not submit a delivery to the lender, then the borrower's reclaim to the OCC will drop at the recycle cutoff, i.e., the borrower will retain the securities and the debit for the stock loan delivery it received from the OCC.

Procedures for EuroCCP's US program

All reclaims to the EuroCCP account will recycle until the reclaim can settle without violating EuroCCP's risk management controls or until the reclaim drops at the recycle cutoff. If the reclaim drops at the recycle cutoff then the receiving Participant will retain the securities and the debit for the delivery it received from EuroCCP.

Processing Unmatched Reclaims

All unmatched reclaims are subject to normal RAD rules and to your collateral and Risk Management Controls. Risk Management Controls are used for all such reclaims, regardless of value. In addition, unmatched reclaims (including partial reclaims submitted in the day cycle) are subject to the processing cutoffs for day-cycle original deliveries.

Reclaims Contact Number

For more information on Reclaims, call DTC's Customer Support Center at (888) 382-2721.

Risk Management Controls

About the Product

Risk Management Controls protect you from the inability of one or more participants to pay their settlement obligations. Risk Management Controls are based on guidelines established by the Federal Reserve Bank (FRB). DTC currently employs four primary Risk Management Controls for processing securities:

- Collateralization
- Net Debit Caps
- Largest Provisional Net Credit (LPNC) for Money Market Instruments (MMIs)
- Issuer/Participant Number (IPN) Collateral Control.

Collateralization

Collateralization ensures that your account has sufficient collateral for DTC to liquidate if you fail to pay your settlement obligation and become insolvent. DTC's collateralization procedures prevent the completion of transactions that would cause your net debit to exceed the total available collateral in your account.

DTC operates on a fully collateralized basis. You are required to have sufficient collateral in your account to support net settlement debits you incur. Transactions that would cause your net debit to exceed the total value of collateral in your account are held in a recycle (pend) queue until sufficient collateral is available.

Your primary sources of collateral are:

- Cash deposited to the Participants Fund
- Proprietary or firm positions (such as dealer, investment, or margin positions) that you
 designate as collateral
- Securities received (and not paid for) versus payment
- Securities added to your account and not received versus payment (such as deposits, free deliveries, free pledge releases, release of segregated securities) that you designate as collateral.

Collateral Valuation of Securities

The value of securities designated as collateral is based on the prior business day's closing market price, less a haircut. Haircuts are used to protect DTC and its participants from price fluctuations if DTC is required to liquidate collateral of an insolvent participant. Furthermore, because DTC may have to finance a participant's failure overnight, DTC's haircut structure takes into consideration haircuts imposed by our line-of-credit banks. The full market value of securities is not normally obtainable from a bank that accepts securities as collateral to support a loan; banks generally consider the relative price volatility of the collateral and impose a haircut on the market value of securities. Securities that are not acceptable to DTC's line-of-credit banks do not receive collateral value in our system; therefore, a 100 percent haircut is applied to these securities.

DTC employs haircuts ranging from 2 to 100 percent. Because the collateral value of securities is based on their prior day's closing market prices, these haircuts may not be sufficient in cases where prices fall dramatically intraday. DTC can reprice and modify haircuts of selected issues intraday and can systemically revalue the collateral of participants holding these securities.

Using the Collateral Monitor to Measure Available Collateral

DTC tracks collateral in your account by a control position called the Collateral Monitor (CM). At the opening of each business day, your CM is credited with your Participants Fund deposit. At all times, the CM reflects the amount by which the collateral in your account exceeds the net debit in your settlement account. In other words, the CM equals the sum of the value of your collateral and net settlement obligation.

For example, if you have collateral securities with a market value of \$10,000 and a 10 percent haircut, the value of your collateral is \$9,000. If you also incurred a debit of \$8,000, your CM is $$1,000 \{(10,000-[0.1 \times 10,000]+(-\$8,000)\}$.

Conceptually, every transaction translates into a collateral flow and a cash flow, one a credit and the other a debit. The net value of these two flows is used to update the CM. Since the value of securities as collateral is subject to a haircut on the market value, the cash component (for settlement value) of each transaction is generally greater in value than its securities component. Thus, the completion of a delivery versus payment generally results in an increase in the deliverer's CM and a decrease in the receiver's CM, based on the difference between the collateral value of the securities and the settlement value of the transaction. Transactions that do not have a cash component, such as deposits and "free" deliveries, are considered to have a zero cash component.

When processing a transaction, DTC verifies that the deliverer's and receiver's CMs will not become negative when the transaction completes. If the transaction would cause either party to have a negative CM and thereby be undercollateralized, the transaction will recycle until the deficient account has sufficient collateral to complete (see Recycle Processing) .

Controlling Collateral

Securities received versus payment are automatically designated as net additions (NA) because the receiver has not yet paid for these securities. Your CM is credited the collateral value (market value minus the applicable haircut) of all positions designated NA. Conversely, your CM is not affected by positions designated as minimum amount (MA). You can manage your collateral in the following ways:

- Opening (start-of-day) securities positions as collateral: You can give DTC standing
 instructions to designate as collateral all securities in your account at the opening of each
 day. All start-of-day positions are then designated NA, and your CM is credited the
 collateral value of the start-of-day positions. Contact your Relationship Manager to change
 your standing instructions.
- Unvalued additional securities: You can give DTC standing instructions to designate all
 unvalued additions of securities to your account (such as deposits and free DOs received)
 as either NA or MA. Contact your Relationship Manager to change your standing
 instructions.

Warning! Consider the implications of classifying your securities as collateral. Collateral can be used to support your debt and therefore can be liquidated by DTC if you are unable to pay your settlement obligation.

• Intraday reclassification of securities: You can submit instructions to DTC using the PTS function DYMA to reclassify as collateral a specific quantity of an issue previously classified as non-collateral. This results in a CM credit equal to the collateral value of the reclassified securities. Conversely, you can use the PTS function DYNA to reclassify collateral securities as non-collateral.

Note- A DYNA instruction will not execute if the removal of the collateral from your account would cause your CM or simulated CM to become negative.

• Settlement Progress Payments (SPPs): You can increase your CM by wiring Settlement Progress Payments (SPPs) to DTC's account at the Federal Reserve Bank of New York (FRBNY). Your CM and your settlement account will be credited for the amount of the SPP; thus, SPPs also reduce your actual net debit. See Wire Instructions for more information.)

To view your CM balance, use the PTS function RMCI.

Net Debit Caps

Net Debit Caps help ensure that DTC can complete settlement, even if a Participant fails to settle. They are based on your net debit history at DTC and automatically rise or fall relative to the average of your highest intraday net debit peaks in accordance with the calculation described below (in "Calculating Your Net Debit Cap"). A Net Debit Cap, recalculated daily, is applied to your account to limit the settlement net debit you could incur at any point during a processing day.

Your Net Debit Cap is limited by DTC's established maximum Net Debit Cap, the value of which is always set lower than DTC's total available liquidity. Currently, the maximum Net Debit Cap you can have is \$1.8 billion.

Before completing a transaction in which you are the receiver, DTC calculates the resulting effect the transaction would have on your account, and determines whether your resulting Net Debit Balance would exceed your Net Debit Cap. Any transaction that would cause your net settlement debit to exceed your Net Debit Cap is placed on a pending (recycling) queue until another transaction creates credits in your account (see Recycle Processing for more information). Most credits are generated when you deliver securities versus payment; pledge securities for value; receive principal, dividend or interest allocations; or wire funds (SPPs) to DTC's account at the FRBNY.

Calculating Your Net Debit Cap

Net Debit Caps are calculated daily as follows:

- 1. The system records your collateral group's three highest intraday net debit peaks over a rolling 70-business-day period, using simulated net debit peaks instead of actual net debit peaks. If you have elected to group your accounts into separate families (see Grouping Accounts into Collateral Families), the system first calculates the average simulated net debit peak of each family, and adds together the average net debit peaks of all your families to obtain your overall average simulated net debit peak.
- 2. The system multiplies your average simulated net debit peak by a factor to determine your Net Debit Cap, which cannot exceed DTC's established maximum of\$1.8 billion. (Factors are based on a sliding scale, between 1 and 2, where smaller average peaks are multiplied by larger factors and larger average peaks are multiplied by smaller factors.)

The established minimum Net Debit Cap is equal to twice the sum of *all* Participants' minimum deposits to the Fund.

Note- Your settling bank can set your maximum Net Debit Cap. However, the maximum amount set by a settling bank cannot exceed the Net Debit Cap calculated by DTC's system. DTC may also limit your Net Debit Cap to any amount regardless of your intraday net debit peaks.

Although most transactions are subject to Risk Management Controls, the following activities override collateralization and Net Debit Cap controls:

- Validated (matched) DO reclaims with a settlement value less than \$15 million for institutional DOs
- Mutual funds purchases through DTC's Fund/SERV system
- DTC-generated activity (such as monthly billing charges)
- Deposit or settlement adjustments
- Short position charges
- Principal and income charges
- Participants Fund charges.

To view your Net Debit Cap and net settlement balance, use the PTS function RMCI.

As an added measure DTC has also established limits on the maximum settlement obligation that a financial family of affiliated DTC Participants can incur. An Affiliated Family means each Participant that controls or is controlled by another Participant and each Participant that is under the common control of any Person. For purposes of this definition, "control" means the direct or indirect ownership of more than 50% of the voting securities or other voting interests of any Person. The maximum "Aggregate Affiliated Family Net Debit Cap" for the Participants comprising an Affiliated Family is currently set at \$2.85 billion.

So that DTC will be able to complete settlement each day in the event of a Participant's inability to settle, DTC currently maintains liquidity resources of \$3.05 billion, including \$1.15 billion cash in the Participants Fund and a committed line of credit in the amount of \$1.9 billion with a consortium of banks.

Grouping Accounts into Collateral Families

If you have multiple DTC accounts, you can group them into families and instruct DTC to allocate a specified portion of your collateral and Net Debit Cap to each family. You must submit instructions in writing to DTC to group your accounts into separate families. Otherwise, all of your accounts will be grouped into one family.

The accounts you designate as a family share a single CM and Net Debit Cap. Securities and cash credited to one of these accounts increase the shared CM and the family's settlement balance, and could therefore serve to benefit transactions of other accounts in the family.

Sharing collateral and Net Debit Caps has advantages and disadvantages. Sharing can be an efficient account structure because it allows accounts to use the available collateral and settlement credits of other accounts in the family. However, you will not be able to designate which account should benefit from specific credits incurred by a member of the family. For example:

Suppose you maintain two accounts, A and B, which are grouped into one collateral family. Assume that both accounts have recycling transactions because of insufficient Net Debit Cap. If account A sends an SPP to DTC, its settlement account is credited. However, because the accounts are set up so that either account can use the available credits, if account B's transactions have a higher priority on the recycle queue, they will complete as a result of the funds that account A sent to DTC.

Conversely, assigning a separate collateral group for every account allows you to segregate your accounts and to allow the accounts to use only a specific portion of your collateral and Net Debit Cap. However, segregating can decrease processing efficiency and increase your intraday financing requirements because excess collateral in one family is not automatically available to an account belonging to another family. You should carefully evaluate your internal procedures and determine which method is most efficient for your operations.

Note- If you group your accounts into families and do not provide DTC with instructions on the specific percentage of collateral and Net Debit Cap to be allocated to each family, DTC allocates collateral and Net Debit Cap to each family based on your intraday net debit peaks relative to your other families.

You can maintain separate families of accounts to allocate your cap among your families at your own discretion. However, DTC will apply a forced-allocation formula to major issuing paying agents, which are defined as IPAs with average daily maturity presentments measured over the most recent month equal to or greater than 5 percent of DTC's total MMI maturity presentments. A major IPA must allocate up to 40 percent of its total Net Debit Cap to its IPA family.

Largest Provisional Net Credit Procedures

DTC established the largest provisional net credit (LPNC) as defined in the DTC Rules as an additional risk management control to protect against the occurrence, on the same business day, of an issuer insolvency or issuing and paying agent's Refusal to Pay and a participant's failure to settle.

If, by 3:00 p.m. eastern time, DTC learns that an MMI issuing and paying agent refuses to pay for the maturity presentments and or periodic interest and principal payments of an MMI issuer, or that an MMI issuer is insolvent, it initiates the Issuer Failure process. This process reverses maturity presentments, valued issuances, and valued deliveries and pledges originating from new issuances of the affected issuer and periodic interest and principal payments on MMI securities issued by that issuer and held in participant accounts at DTC. These reversals are allowed to override collateral monitor and net debit cap controls so additional protection is required. LPNC procedures instead withhold credits due to valued deliveries or pledges of the MMI securities of the affected issuer so that the reversed transactions do not cause the net debit cap balance of a participant to exceed its net debit cap or the collateral monitor control.

DTC tracks MMI activity in each participant's account intraday and, as MMI transactions (including but not limited to, P&I payments credited to the account, and deliveries to and maturity presentments from the account) satisfy positions and risk management controls (other than LPNC), the settlement account of the participant reflects in real time the net debit balance or net credit balance for each Acronym, as defined in the DTC Rules. DTC continuously monitors the applicable MMI Acronyms in which each participant has the two largest net credits to determine the LPNC in accordance with the DTC Rules.

By way of example only, on a business day, prior to settlement, if an account has an MMI maturity presentment for which a credit of \$50 million is due, but it is also purchasing an MMI issuance in the same Acronym for \$25 million, and both the maturity presentment and issuance deliveries have satisfied position controls, net debit cap and collateral monitor controls, the system will reflect, with respect to this Acronym, a net credit due to the settlement account of \$25 million. A similar calculation would be completed with respect to each Acronym for which a net credit to the settlement account is anticipated to determine the two largest pending net credits for any Acronym, the sum of which equals the LPNC at that time.

The amount of the LPNC will not be credited to the settlement account until after the time for reversals has passed, at which time the amount is credited to the settlement account, offsetting any net debit balance to reduce the settlement obligation, if any, of the participant. (It may be that the credit of the amount of the LPNC to the settlement account of the participant creates a net credit balance, so that the participant has no settlement obligation and is due a net payment in settlement.)

LPNC will not apply to any MMI Acronym for which the value of issuances exceeds the value of maturity presentments for that business day, as further provided in Rule 9(C), Section 1 of the DTC Rules.

Note- LPNC procedures remain in effect only until the later of 3:05 p.m. eastern time or any time to which the period for MMI reversals may be extended by DTC in accordance with the Rules and Procedures (including this Settlement Service Guide). To view the LPNC for an account, use the Settlement Web "Cash and Balances" navigation bar.

LPNC Procedures Applied to Net Debit Caps

To accommodate LPNC procedures, DTC established a simulated net balance, which is calculated by computing your actual net settlement balance and reducing it by your LPNC, if any. If the simulated balance results in a net debit, DTC will not allow the simulated net debit to exceed your net debit cap. This helps protect you and DTC so that even if DTC reverses transactions in the MMI Acronyms as to which the credits have been withheld, your net debit after the reversals will not exceed your net debit cap. If you incur only net debits in the MMI programs in which you have activity, your LPNC value will be zero. To determine your LPNC intraday, use the PTS function RMGI the Risk Management Controls Inquiry on the Settlement Web.

Note- Intraday, until approximately 3:05 p.m. eastern time, your simulated net debit, *not* your actual net debit, is used for calculating net debit cap controls.

LPNC Procedures Applied to Collateralization

DTC established a simulated Collateral Monitor (CM) to show your excess collateral after LPNC procedures are applied to your account. DTC calculates your simulated CM by subtracting your LPNC from your actual CM. Until approximately 3:05 p.m. eastern time, transactions that would make your simulated CM negative are not completed; they are held in your recycle queue until you receive sufficient collateral in your account to complete them.

LPNC procedures help protect you and DTC so that a failing participant's net debit balance remains collateralized even if DTC reverses transactions in the MMI Acronyms as to which credits have been withheld.

Issuer/Participant Number Collateral Control

Collateral in a participant's account associated with the participant (such as the participant's own commercial paper) increases risk to DTC if that participant failed to pay DTC and its obligation is supported partly or fully by the failing participant's associated securities. To eliminate this risk, DTC's system monitors collateral received in a participant's account related to that participant.

IPN will link to a participant's account securities related to it and withhold from the participant any collateral value associated with the security. In effect, transactions processed to a participant account will remain essentially the same, except that no increase will be applied to the Participant's collateral monitor for the collateral value of securities received that are associated with the Participant. IPN is based on a participant's legal entity; therefore, this control will apply to every account of a participant. For example:

When a participant has an IPA account that issues MMI securities on its own behalf and has a custody account in the same or a separate collateral group, and the IPA account processes an MMI issuance delivery to its own custody account in its own MMI securities, the custody account will receive no collateral increase for the collateral value of that issuance.

IPN control will not affect a participant's net debit or its LPNC calculations. Because IPN control affects the collateral value of an associated account, IPAs may wish to monitor their accounts more closely intraday for insufficient collateral, especially if they have net maturity presentments versus issuances in their own MMI securities on a particular day.

Associated PTS Functions

The following PTS functions are used in association with Risk Management Controls.

Use this function	То
DYMA	Reclassify non-collateral securities as collateral.

Use this function	То
DYNA	Reclassify collateral securities as non-collateral.
PEND	View transactions that are recycling for Risk Management Controls.
RMCI	View Risk Management Controls and your net balance.

Risk Management Controls Contact Number

For more information on Risk Management Controls, call DTC's Customer Support Center at (888) 382-2721.

Extension Requests

DTC cannot grant you an extension of the foregoing deadlines unless a substantial volume of transactions is involved. Please notify DTC as early in the processing day as possible if you think you may need to request an input extension. This will allow DTC to discuss alternative methods of input.

To request an extension call DTC's Settlement Hotline at 212-855-5800.

Associated PTS Functions

The SPOS function is used in association with the Settlement Processing Schedule and allows you to view the detail short position penalty charges.

Security Holder Tracking Service

About the Product

The Security Holder Tracking Service allows a third party administrator to track the number of beneficial holders of an issue.

Background

The Security Holder Tracking Service or the SH Tracking Service will allow issuers, either themselves or through an issuer-designated administrator, to track and limit the number of beneficial owners for an individual CUSIP.

In order to support the settlement and asset servicing of certain securities, DTC was asked to build a mechanism which would allow issuers to track and limit the number of beneficial owners of its securities.

For more information, contact DTCC Relationship Management at (800) 422-0582.

Process Overview

To support the tracking of holders in a designated security, DTC will provide access to its Inventory Management System (IMS) to those administrators assigned by the issuer. Once the issue is

established on the DTC master file as one that requires tracking, all transactions will be held in IMS awaiting administrator approval to proceed to settlement.

In order to use the service, DTC must be notified during the underwriting eligibility process that the issue requires third-party tracking. Upon receipt of all required documentation, DTC will activate the tracking indicator on its security master file and provide IMS access to the assigned administrator, but only to allow for inquiry and approval/disapproval of transactions assigned to the respective administrator.

During the Underwriting closing process, the position will move from a DTC internal account to a designated sub-account of the lead underwriter. The move from the DTC internal account to the lead underwriter is subject to the approval of the administrator. Once the shares are moved into the designated sub-account, all share movement from that point on will require the approval of the designated administrator through IMS.

Once transaction approval has been received, and all other settlement risk controls have been met, the shares will move from the delivering participant's sub-account to the receiving participant's sub-account, either free or versus payment. These Security Holder Tracking transactions will use a new Account Transaction Processor (ATP) activity code in DTC (42). Normally, deliver orders move position from one participant's general free account to another participant's general free account, either free or versus payment.

For risk management purposes, these issues will be designated as having zero collateral within DTC's settlement system.

Eligibility

The eligibility process for a tracked security to be made and remain DTC-eligible will generally remain the same. In addition to the traditional process, DTC must be instructed in writing to set up a specific CUSIP for tracking. At the same time, the issuer must instruct DTC as to whom will perform the function of the administrator for the CUSIP within the SH Tracking Service.

Upon receipt of all of the aforementioned documentation, DTC will make the CUSIP DTC-eligible and will activate the tracking indicator on its security master file. Additionally, once it is made eligible, DTC will perform asset servicing for the issue. The administrator appointed by the issuer will control movements of the particular CUSIP for which it has been appointed. Once the tracking indicator has been activated on the master file and the administrator has been appointed, no transfer of the securities shall take place in the tracked security without the approval of the administrator through the Inventory Management System (IMS). The administrator, based on requirements of the issuer, shall be solely responsible for determining whether a transaction should be effected in DTC. Once approved by the administrator, DTC may perform centralized book-entry settlement.

IMS will only allow an administrator access to view and approve transactions for CUSIPs for which they have been appointed administrator as reflected in DTC's records. ¹

The tracked securities will not be held as part of a Participant's general free account nor will they be considered eligible collateral in DTC's settlement system.

Although the SH Tracking Service was developed to address the specific concerns of closely held Rule 144A issues, in practice it could be used for other types of securities for which the number or character of the beneficial owners requires some level of control by a third-party administrator.

Trade Submission

¹ As DTC is relying solely on the instructions of the administrator in order to effect settlement in tracked securities and has no knowledge of the number or character of the underlying beneficial owners, use of the SH Tracking Service by any party will constitute an agreement that DTC shall not be liable for any loss or damages related to the use of the SH Tracking System. Each user of the SH Tracking Service agrees to indemnify and hold harmless DTC and its affiliates from and against any and all losses, damages, liabilities, costs, judgments, charges, and expenses arising out of or relating to the use of the SH Tracking Service.

 Regardless of where executed, trades will be submitted to the Tracking Service either via Omgeo's TradeSuite/ID system (Affirmed Confirms) or a DTC Deliver Order (DO).

Directly Submitted DOs

- DTC developed a new DO option through which to submit both valued and free Security Holder Tracking deliveries. These items can be submitted via PBS and machine-readable media.
- DTC's new DO 24x6 Service, Deliver Order Input (DOI), is being enhanced to support Security Holder Tracking delivery input via ICM/MQ and ICM/CF2
- Participants should refer to the following link to receive DO ISO and DOI CCF message layouts: http://www.dtcc.com/products/documentation/cs/cs.php (under the CCF Settlement category).
- Administrators also have the option of receiving confirmations from Omgeo's TradeSuite/ID system as an "Interested Party."

Security Holder Tracking Transaction Processing

- Security Holder Tracking deliveries will use a new Account Transaction Processor (ATP)
 activity code, 42, in DTC. This new activity code will move position from the delivering
 participant's designated sub-account to the receiving participant's designated sub-account,
 either free or versus payment. ATP will use the same serial number (identifies subaccounts) for both deliverer and receiver.
- All DO activity (e.g., stock loans, reclaims) will be subject to administrator's approval.
- For Security Holder Tracking transactions received from Omgeo's TradeSuite/ID system, participants still need to authorize their deliveries in IMS as they do today for DTC to attempt settlement (in addition to the third-party administrator approval).
- Trades submitted via Omgeo will be identified as either transaction type Matched Institutional Trades (MITS) or Late Matched Institutional Trades (LMIT) in IMS.
- Security Holder Tracking deliver orders follow regular Receiver Authorized Delivery (RAD) rules. Security Holder Tracking transactions submitted to DTC from Omgeo are not subject to RAD.
- DTC ATP Activity Code 42 deliveries will appear on the DTC Participant Account Statement under one of the following current Settlement Activity Codes (as applicable): 19 (ID), 26-0 (DO SDFS), 26-5 (Stock Loan DO), 26-6 (Stock Loan Return DO).
- Stock loan reason codes will be permitted for Security Holder Tracking DOs, and will update the stock loan tracking memo accounts as with normal stock loan tracked DOs.
- Participants will be able to identify those transactions awaiting administrator approval in IMS by means of PBS Security Holder Tracking inquiry functionality.

IMS Profiles for Security Holder Tracking Processing

- Recycle, Submission, Activity Code, Asset Class, and Security Code profiles will not apply to activity code 42.
- Security Holder Tracking transactions will be able to be reintroduced, so activity code 42 is being added to the Reintroduced Drop profile.
- Participant Entered Transactions (PETS) profiles will apply.

Reclaims

 Participants will be able to reclaim Security Holder Tracking transactions via the ART function (PTS/PBS) and the automated DO 24x6 service, DOI.

Activity Research Tool (ART)

The new ATP activity code 42 will be displayed in the ART summary₇ and detail and reclaim screens. The serial number is being added to the ART detail and reclaim detail

screens. Activity Code 42 is also being added in the activity history and intra-day activity systems.

Drops and Pends

- Security Holder Tracking dropped deliveries will appear on participant drop reports like other DOs.
- Participants will be able to view Security Holder Tracking DOs in the PEND function like other DOs. All other DO actions (e.g., Pend Hold, Pend Cancel) will be available for Security Holder Tracking items and will be billed at existing rates.

Output

- DTC will include Security Holder Tracking deliver order transactions with the new activity code of 42 in the DTFPART Settlement Participant Activity files.
- Participants should make necessary changes to their systems to handle the new activity code 42 in DTFPART.
- The ATP activity code of 40 will be used in DTFPART for the initial underwriting takedown delivery from DTC's internal Underwriting account to the lead underwriter's sub-account.

Third-Party Administrator Trade Approval and State Changes

- DTC's Inventory Management System (IMS) is being made available to third-party administrators for trade approval prior to settlement.
- A new PBS function/interface is being created for administrators to view (inquiry), approve and disapprove transactions pending settlement at DTC.
- Alternatively, administrators may approve/disapprove transactions through ISO command messages. Messaging layouts - including status codes, MT548, can be accessed via the following link: http://www.dtcc.com/products/documentation/cs/cs.php (under the CCF Settlement category).
- If a delivery is reclaimed or dropped after it has been approved by the administrator, the administrator can be notified through receipt of transaction state change messages from DTC and/or by IMS inquiry. Administrators should only update records for "Made" transactions.
